

The type-specimens of *Cytheropteron intermedium*, which differ scarcely in any degree from those here described, were fossils from the Antwerp Crag (Tertiary). The Challenger specimens are from Vigo Bay, 11 fathoms.

[Pl. XXXIV. fig. 1, *a-d*. *a* Shell seen from left side, *b* from above, *c* from below, *d* from front. Magnified 50 diameters.]

5. *Cytheropteron abyssorum*, n. sp. (Pl. XXXIV. fig. 3, *a-d*).

Shell tumid; seen from the side, subrhomboidal, highest in the middle, height equal to about two-thirds of the length; anterior extremity obliquely rounded, posterior produced into a median acuminate beak; dorsal margin moderately arched, sloping gently towards the front, and very steeply behind, ventral strongly convex; seen from above, the shape is irregularly hexagonal, widest behind the middle over the alar prominences, width a little greater than the height; from the alar processes the lateral margins converge gently and with a slight sinuation towards the front for about one-third of the length of the shell, then converging abruptly, terminate anteriorly in a large acuminate process; behind the alæ the sides converge for a short space rectangularly, then are directed backwards, meeting at an acute angle in a long acuminate projection; end-view triangular, apex acute, lateral angles broad and produced; lateral margins gently convex, ventral almost straight. Surface of the valves marked partially on the sides with angular excavations, and on the ventral surface with irregular longitudinal sulci. Length, 1-50th of an inch (.5 mm.).

A very well-marked species, if we exclude the possibility of its being a sexual form or the young of that next to be described, *Cytheropteron assimile*, to which it bears considerable resemblance. *Cytheropteron assimile*, however, is much larger, the contours much more rounded, and the lateral alæ not so prominent as in *Cytheropteron abyssorum*. Dredged in lat. 42° 42' S., long. 134° 10' E., 2600 fathoms (Station 160).

[Pl. XXXIV. fig. 3, *a-d*. *a* Shell seen from left side, *b* from above, *c* from below, *d* from front. Magnified 50 diameters.]

6. *Cytheropteron assimile*, n. sp. (Pl. XXXIV. fig. 3, *a-d*).

Shell, seen from the side, oblong, flexuous, subrhomboidal, not much lower in front than behind, highest near the middle, the height being equal to more than half the length; anterior extremity evenly rounded, posterior produced in the middle into a wide, obtusely rounded beak, above which it is rather deeply excavated, nearly straight below and looking obliquely backwards and downwards, dorsal margin boldly arched, ventral convex behind and almost straight in front; seen from above, almost like *Cytheropteron abyssorum*, but narrower in proportion to the length; the end view is much broader and more rounded dorsally than in *Cytheropteron abyssorum*, while the ventral surface is rather deeply indented, and the angles, instead of being produced, are rounded off. The